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10/813,910	03/26/2004	Richard J. Schneider	IGT1P315/AC00037-002	5053

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EXAMINER	
LEIVA, FRANK M	

ART UNIT	PAPER NUMBER
3717	

NOTIFICATION DATE	DELIVERY MODE
01/21/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@wavsip.com

Office Action Summary	Application No.	Applicant(s)	
	10/813,910	SCHNEIDER, RICHARD J.	
	Examiner	Art Unit	
	FRANK M. LEIVA	3717	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,15,17-29,31-40,42-49,51,53,55 and 58-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,15,17-29,31-40,42-49,51,53,55 and 58-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/26/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgements

1. The examiner acknowledges claims 1, 26 and 38 amended in applicant's submission filed 26 August 2009. Pending claims are now 1-12, 15, 17-29, 31-40, 42-49, 51, 53, 55 and 58-62.

Response to Arguments

2. Applicant's arguments filed 29 August 2009 have been fully considered but they are not persuasive for the following reasons;

3. In response to the argument on page 15 of applicant's remarks regarding the rejection of claim 1; "Okada does not disclose or suggest a warning generator system that operates in this manner. Okada discloses that the tracked results for the total sales amount of all slot machines are displayed for only one time interval, that is, for instance, every 30 minutes. (Col. 8, line 66 to Col. 9, line 5). Thus, in this respect, Okada teaches away from Applicant's claimed invention. Further, in Okada, the warning threshold is not based on the duration of a predetermined time period. Rather, in Okada, the warning threshold is based on the difference between the expected (KKUn) and actual (JKUn) sales values. (Col. 8, lines 21-32)." For only one time interval (Okada: col. 9 lines 65-66) where explicit in saying that "*Therefore these time periods T1 and T2 are changed, in order to improve the alarm reliability.*" Thus there is a plurality of time periods. And if the alarm is not based on the time period, why is there a time period T1 and T2 at all?

4. In response to the argument on page 16 of applicant's remarks regarding the rejection of claim 26; "Okada and Giobbi neither disclose nor suggest a data calculation system that operates in this way. Indeed, in Okada, jackpot payouts are always included in the usage calculations. Thus, Okada clearly teaches away from Applicant's claimed invention." The examiner's detailed action dated 26 May 2009, states that the article Outliers teaches the exclusion of data that may cause false readings. And although the applicant may

insist that a Jackpot is not erroneous data, for all of us with ordinary skill in the art, a Jackpot is only calculated to occur about once every 10,000 games and any time it occurs it creates an exception in the variance reports for at least a week until the gaming machine has enough time to average it into its regular play.

5. In response to the arguments regarding the rejection of claims 38 and 46; see above paragraph for the same reasons.

6. In response to the argument on page 18 of applicant's remarks regarding the rejection of claim 51; "It is submitted that claim 51 would not have been obvious in view of Okada and Giobbi. The difference value in claim 51 is the difference between the amount of value accepted into the gaming device and the amount of value paid by the gaming device. This difference value is compared to a predetermined value. In Okada, the difference value is the difference between expected sales (KKUn), which is based on the number of tokens inserted and paid-out by a slot machine, and actual sales (JKUn) which is based on the number of tokes dispensed by a paired token dispenser. An alarm signal is emitted in accordance with this difference value. (Col. 8, lines 15-32). The difference value is compared to some number of monetary units. For example, if the difference is more than 5000 monetary units, a red alarm is emitted. (Col. 8, lines 33-44)." The statement from the applicant traverses itself, because a difference value is calculated by subtracting both values and that expected sales is the difference between the value accepted into the gaming device and the value paid by the gaming device.

7. For the reasons covered above the examiner deems the arguments not persuasive and the rejections proper.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-2, 5, 7, 10, 12, 15, 17-25, 51, 53, 55 and 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US 5,496,032) in view of Giobbi (US 6,749,510 B2).

10. Okada discloses a management system designed to detect fraudulent acts in a gaming hall (Okada: abstract). The system monitors the number of inserted and paid-out tokens from a slot machine (Okada: abstract). The collected data is compared and a discrepancy in the calculation is considered a sign of theft thus the system initiates an alarm based on the level the measured divergence (Okada: abstract). The system consists of token dispenser 161332 connected to slot machines 151332 (Okada: col. 4, lines 26-29), token counter 17p, money exchanger 18p, 'sixteen system control units' (SCU) lop & a local computer 27 through a local area network (LAN) established from optical fiber cables 12 (Okada: fig. 1). Furthermore, the LAN portion of the system is connected to a host computer through a wide-area network (WAN) provided by a modem connection **38** (Okada: col. 5, lines 10-1 3).

11. Regarding claim 1; the disclosed slot machine 15p and its components such as token dispenser 16p (Okada: col. 4, lines 26-29) and token counter 17p are considered gaming devices. The art discloses calculating the expected sales data from the total number of playing media inserted and the total number of playing media paid out as dividends for wins (Okada: col. 2, lines 31 -34). Thus the prior art contains a value tracker that tracks the amount of monetary value accepted and outputted from the gaming device. The expected (KKUn) and actual (JKUn) sales values are calculated at the end of a predetermined (Okada: col. 2, lines 38-40) time period (Okada: col. 3, lines 7-8). Additionally, the prior art provides several time periods of different durations wherein the duration of one time period is at least a day long while the duration of another time period is less than a day, (Okada: col. 7, lines 47-55), where the time period can be the entire day of operation or what is called the "open-hall actual total

quotient": two minutes (Okada: col. 6, lines 54-56), 30 minutes (Okada: col. 9, lines 2-3) or any duration deemed reliable (Okada: col. 9, lines 65-66). An analysis resulting in zero is considered normal (Okada: col. 8, lines 33-34); however a value greater then zero triggers an alarm or warning signal. The severity of the alarm is based on a comparison between the results and an established range (Okada: col. 8, lines 34-41): Green alarm signal produced from a range of 1 to 3000 money units Yellow alarm signal produced from a range of 3001 to 5000 money units Red alarm signal produced from a range of 5001 to infinity money units Therefore the art teaches generating an alarm or warning signal based on a comparison of the accepted and outputted monetary value for predetermined time periods for different durations.

The prior art remains silent towards basing the warning threshold on the duration of the time period. The prior art further states the expected value is comprised of an expected individual sales amount (Okada: col. 6, line 1). Giobbi teaches monitoring a gaming hall to determine the high/low time periods in an attempt to determine an expected amount of game revenue for the duration of time (ex. 6pm - l l pm) (Giobbi: col. 10, lines 33-43). In other words, Giobbi teaches altering the expected individual sales value in accordance to historical data as an attempt to maximize the casino's earnings. Thus an ordinary artisan would combine the two references in an attempt to create a gaming system that is able to properly calculate the expected individual sales amount for different durations of time (ex. 6pm - l l pm) in a day. Thus the expected sales amount would alternate between different values during different time periods. Additionally, the warning threshold ranges would also require an update in accordance to the increased/decreased expected value due to the combination in an attempt to maintain the same proportional alarm ranges (Okada: col. 8, lines 25-32) disclosed by the art. In other words, red alert alarm defined at 5,000 would always go off if the expected sales (KKUn) are 100,000 and actual sales (JKUn) are 10,000. Thus the art combination teaches associating a generated warning threshold based on the duration of the time period.

12. Regarding claims 2, 5, 7, 10, 12, 53 and 55; tokens are physically discharged for distribution from a token dispenser 16p (Okada: col. 4, lines 29-32) and money changer 18p (Okada: col. 5, lines 25-28) in exchange for a cash to token value equivalent. As stated above, a gaming device consists of a slot machine 15p and its components such as token dispenser 16p (Okada: col. 4, lines 26-29). The Examiner views the insertion of a token into a gaming device (Okada: col. 5, lines 28-30) as an act of transferring and acceptance of credit or cash equivalent to the device by having tokens deposited into the gaming device. As discussed above, the gaming devices are tracking an inserted token which is a credit or cash equivalent. Furthermore, the Examiner views a token as a physical device that transfers credit or cash equivalent. The art also discloses token counters 17p printing receipts that display a counted number of tokens. An issued receipt is accepted by the premium exchange department for goods or money (Okada: col. 5, lines 42-46) thus receipts function as coupons or tickets that are redeemed elsewhere on a gaming network such as the exchange department. Furthermore, the art teaches tracking the amount of tokens outputted by a gaming machine (Okada: abstract) thus the system will also track jackpots.

13. Regarding claims 15 and 17-19; the art teaches reset-able time periods since an analysis is determined for each elapsed time period (Okada: col. 3, lines 7-8). Since the prior art presents the time periods as variables (TI, T2), a time period lasting any duration (Okada: col. 6, lines 55-58) is inherent, thus teaching a time period of one hour or an employee work shift. A full shift is the maximum an employee is able to work at the game hall equaling the duration of the hall's operating hours. The art teaches the system tracking the total number of tokens entered into all slot machines during the period of gaming hall opening (Okada: col. 7, lines 47-49) until the hall closes (Okada: col. 8, line 56). Therefore teaching a time period equaling the duration of an employee work shift. Furthermore, the time periods are occurring concurrently since each slot machine has their own time period (Okada: col. 6, lines 55-59).

14. Regarding claims 20-23 and 25; the prior art teaches displaying a visual alarm (Okada: abstract) on a monitor (Okada: col. 4, lines 3-5) coupled to the network (Okada: fig. 1). As stated above, the gaming device provides the tracking data to a SCU lop (Okada: col. 5, lines 51-54) thus the art teaches a gaming device inherently containing a value tracker able to provide the number of accepted and outputted tokens in real time ,(Okada: col. 10, lines 53-56). Thus the value tracker is resident on a network with a gaming device (Okada: fig. 1). Furthermore, the local computer 27 calculates (Okada: col. 5, line 61) the difference between the collected data, which in turn is used to determine an alarm state (Okada: col. 8, lines 19-24). Thus the local computer 27 has a warning generating system that is resident on a network (Okada: fig. 1).

15. Regarding claim 24; Okada discloses a local computer 27 that calculates (Okada: col. 5, line 61) the difference between the collected data during different time (Okada: col. 8, lines 49-51) periods (Okada: col. 6, lines 55-59) and produces a warning signal when a fraudulent act is detected. In other words, the prior art fails to disclose a warning generating system in a gaming device. However an ordinary artisan including the program code of the local computer into each gaming machine is considered to produce a predictable result using known elements under KSR.

16. Regarding claim 51; the limitations that are found in claim 1 are rejected under the same rational. The art discloses calculating the expected sales data from the total number of playing media inserted and the total number of playing media paid out as dividends for wins. The number of playing media can be converted to the money amount by referring to the value of the playing medium (exchange rate) (Okada: col. 2, lines 31 -36). The prior art teaches defining the range for a red alarm as 5000 to (KKU - JKUn) (Okada: col. 8, lines 31-32) and JKUn is based on the actual total sale amount for each token dispenser (Okada: col. 7, lines 27-29). A gaming device is considered by the prior art as the combination of a slot machine and a token dispenser (Okada: col. 4, lines 27-29). Therefore the prior art teaches subtracting a monetary value amount accepted into the gaming device (wagers) from the recorded amount of monetary value

paid by the gaming device (awards) then comparing the difference value to a predetermined value (alarm range).

17. Regarding claim 58; the prior art discloses three type of alarm or warning, each representing a different level of fraud intensity (Okada: col. 8, lines 34-41). Thus the art teaches the green alarm as a first type of warning and yellow as the second highest type of warning.

18. Regarding claims 59-62; the reference teaches generating a visual alarm or warning (Okada: abstract). The art teaches halting or prohibiting a game on a gaming device from operating when a warning is issued (Okada: col. 5, lines 4-7). A warning signal is transmitted over the network to the host computer in the headquarters for operation evaluation (Okada: col. 5, lines 10-1 3). Furthermore the disclosed graphs (Okada: fig. 3-6) that are printed out as alarm data (Okada: col. 5, line 3) are viewed to teach the generation of event log entry.

19. Claims 26-29, 31-32, 35-40 and 42-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada and Giobbi in view of "Dealing with 'Outliers': How to Maintain Data's Integrity"

20. The above description of the art combination and the limitations they pertain is considered within this art rejection as well. Okada remains silent towards excluding jackpot payouts from the calculated results. The prior art article "Dealing with 'Outliers': How to Maintain Data's Integrity" from here on will be referred to as Outlier. The article defines an outlier as an unusual data value appearing in a data collection as a result of an error or a rare event. The author considers outliers a problem since their presence inflate sum of squares, distort estimates and p-values which can all lead to faulty conclusions.

21. Regarding claims 26, 38 and 46; Okada discloses a management system that determines fraudulent acts and produces warning signals based on a statistical analysis. The prior art article 'Outliers' teaches how rare or unwanted data can distort an estimation resulting in faulty conclusions. Thus the article teaches excluding data from a data calculation. The inclusion of the prior art article into the system disclosed by Okada would prevent jackpot events from resulting in a false analysis of a *fraudulent act,* or an unwarranted payout warning*;* therefore it would have been obvious to an ordinary skilled artisan to combine the references.

22. Regarding claims 27, 39 and 47; the limitations that are found in claim 2 are rejected under the same rational therefore see above.

23. Regarding claims 28; the limitations that are found in claim 20 are rejected under the same rational therefore see above.

24. Regarding claims 29, 40 and 48; the limitations that are found in claim 7 are rejected under the same rational therefore see above.

25. Regarding claims 31; the limitations that are found in claim 60 are rejected under the same rational therefore see above.

26. Regarding claim 32; Okada discloses the local computer containing a buzzer 32 (Okada: col. 4, lines 65-66). Therefore the prior art teaches the use of an audible sound as a warning signal.

27. Regarding claims 35 and 36; Okada further discloses the warning signal comprises creating a list of suspect gaming devices (Okada: fig. 4; col. 8, lines 61-64) and creating an entry in an event log or print out of the data (Okada: col. 8, lines 15-21).

28. Regarding claims 37 and 45; the limitations that are found in claim 59 are rejected under the same rational therefore see above.

29. Regarding claims 42 and 43; Okada teaches the use of a comparator to determine if a calculated value occurs within a range defined by predetermined values (Okada: col. 8, lines 25-32). The system generates a warning signal based the range or threshold amount the calculated results occur within (Okada: col. 8, lines 33-44).

30. Regarding claims 44, 49; Okada discloses a local computer 27 calculating (Okada: col. 5, line 61) the difference between the collected data during a time (Okada: col. 8, lines 49-51) period (Okada: col. 6, lines 55-59). The system generates a warning signal based the range or threshold amount the calculated results occur within (Okada: col. 8, lines 33-44).

31. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada and Giobbi in view of "Dealing with 'Outliers': How to Maintain Data's Integrity" and further in view of Oles et al. (US 200310060280 Al).

32. As it pertains to claim 33 and 34; the above description of the art combination and the limitations they pertain is considered within this art rejection as well. Okada teaches LAN established from optical fiber cables 12 (Okada: fig. 1) and WAN provided by a modem connection 38 (Okada: col. 5, lines 10-13). However remains silent towards the use of a wireless communication system instead of optical fiber cables or modem connection. Oles teaches a casino money handling system with a gaming machine networked to a control station. The link may be wired or wireless and cites the IEEE 802.11 b wireless standard as an example (Oles: par 62). An IEEE 802.11 b wireless network contains a plurality of radios monitoring the same frequency. Therefore, in view of Oles et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the wired optical connection

between the local computer and gaming machine of Okada with a wireless IEEE 802.11 b wireless network in order to reduce the number of wires necessary in the system. The warning signal would be transmitted wirelessly from the local computer to the gaming machine in order to halt operation.

33. Claims 3-4, 6, 8-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada and Giobbi in view of LeStrange (US 5,470,079).

34. As it pertains to claims 3-4, 6, 8-9 and 11; the above description of the art combination and the limitations they pertain is considered within this art rejection as well. Okada remains silent towards the establishment of player accounts on the network through smart cards. LeStrange teaches an accounting and monitoring system for game machines that tracks credit cards, smart cards, or other data cards containing credit accounts (LeStrange: col. 4, line 64 - col. 5, line 5). In other words, the reference teaches the establishment of an account for a player on the network that allows for credit transfers to a gaming device through a smart card tracking of. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the management method for the gaming hall of Okada to include the management and accounting of cashless forms of payment (i.e., credit cards, smart cards, and player accounts) taught by LeStrange in order to encourage more people to use the game machine by providing more convenient payment options.

Examiner's Note

35. For the record, the Examiner would like to state that "Dealing with 'Outliers"' teaches excluding values from the collected dataset in an attempt to prevent unnecessary/ rare/unwanted data from distorting or causing a faulty conclusion. The perspective of Okada is to determine the occurrence of a fraudulent act towards a casino machine based on an expected and actual sales amount. A difference between

the two values that fails within the set ranges is considered an indication of missing revenue, a fraudulent act. Thus a jackpot event that results in a payout that reduces the actual sales amount significantly will cause the system to determine a fraudulent act. In other words, the establishment "expects" a certain sales amount today (10,000) however a large jackpot was awarded thus lowering the "actual" sales amount (1,000) causing the system to calculate (9,000) an abnormality (red alarm) even though the awarding of a large jackpot is not a fraudulent act. Thus large jackpot values that occur rarely will cause the calculation of a false alarm hence should be removed from the data pool as taught by the article in an attempt to prevent a faulty conclusion.

36. The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed .... "In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK M. LEIVA whose telephone number is (571) 272-2460. The examiner can normally be reached on M-F 11:00 am - 4:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melba Bumgarner can be reached on (571) 272-4709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melba Bumgarner/
Supervisory Patent Examiner, Art Unit 3717

/F. M. L. /
Examiner, Art Unit 3717